DOCUMENT RESUME

ED 428 875 PS 027 455

AUTHOR Harding, Ann; Szukalska, Agnieszka
TITLE A Portrait of Child Poverty in Australia in 1995-96.
PUB DATE 1998-11-26
NOTE 38p.; Paper presented at the Australian Institute of Family Studies Conference (6th, Melbourne, Australia, November 26, 1998).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Children; Demography; Employed Parents; *Family Income; Foreign Countries; National Surveys; One Parent Family; *Poverty; Statistical Surveys; Unemployment
IDENTIFIERS *Australia; Working Poor

ABSTRACT

In Australia, there has been growing concern about increasing income inequality, a possible accompanying increase in poverty rates, and how poverty impacts on the mental and physical well-being of children. This study analyzed Australian Bureau of Statistics income survey data to assess the extent of child poverty in Australia in 1995-1996. Findings indicate that the extent of child poverty is critically dependent upon where the poverty line is drawn, with estimates ranging from about 8 percent to 25 percent. The study suggests that the average dependent child in poverty in Australia lives with both parents, both of whom have no educational qualifications; is less than 13 years of age; lives with one or more siblings; has Australian-born parents who have bought or are buying their own home; has at least one employed parent, but with low earning due to self-employment or low wages; and lives in a family whose principal income source is government cash benefits. (Child poverty rates delineated by family and household characteristics, by labor force characteristics, and other factors are appended. Contains 27 references.) (KB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 428 875

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

A PORTRAIT OF CHILD POVERTY IN AUSTRALIA IN 1995-96

Ann Harding and
Agnieszka Szukalska

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Ann Harding

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Paper presented at the 6th Australian Institute of Family Studies Conference, Melbourne, 26 November 1998

PS 027455

BEST COPY AVAILABLE

National Centre for Social and Economic Modelling
• Faculty of Management • University of Canberra •

The National Centre for Social and Economic Modelling was established on 1 January 1993, and currently receives core funding from the University of Canberra and the federal departments of Family and Community Services, Health and Aged Care, and Employment, Training and Youth Affairs.

NATSEM aims to enhance social and economic policy debate and analysis by developing high quality models, applying them in relevant research and supplying consultancy services.

NATSEM's key area of expertise lies in developing and using microdata and microsimulation models for a range of purposes, including analysing the distributional impact of social and economic policy. The NATSEM models are usually based on individual records of real (but unidentifiable) Australians. This base produces great flexibility, as results can be derived for small subgroups of the population or for all of Australia.

NATSEM ensures that the results of its work are made widely available by publishing details of its products and research findings. Its technical and discussion papers are produced by NATSEM's research staff or visitors to the Centre, are the product of collaborative efforts with other organisations and individuals, or arise from commissioned research (such as conferences). Its policy papers are designed to provide rapid input to current policy debates and are not externally refereed.

It must be emphasised that NATSEM does not have views on policy: all opinions are the authors' own and are not necessarily shared by NATSEM or its core funders.

Director: Ann Harding

© NATSEM, University of Canberra 1998

National Centre for Social and Economic Modelling
University of Canberra ACT 2601 Australia
170 Haydon Drive Bruce ACT 2617

Phone + 61 2 6201 2750 Fax + 61 2 6201 2751
Email natsem@natsem.canberra.edu.au
Website www.natsem.canberra.edu.au

PS 027455

Abstract

In Australia, as in many other developed countries, there has been growing concern about increasing income inequality and a possible accompanying increase in poverty rates. One of the areas of greatest concern is children and how poverty impacts on their well-being (both mental and physical). In this paper the latest ABS income survey data are used to assess the extent of child poverty in Australia in 1995-96.

The analysis suggests that most children in poverty in Australia are in that situation because one or both of their parents is unemployed, a sole parent, self-employed or one of the 'working poor'.

Author note

Ann Harding is the inaugural Director of NATSEM and Professor of Applied Economics and Social Policy at the University of Canberra. Agnieszka Szukalska is a Research Assistant at NATSEM at the University of Canberra.

Acknowledgments

This work was supported by ARC Grant No A79803294.

General caveat

NATSEM research findings are generally based on estimated characteristics of the population. Such estimates are usually derived from the application of microsimulation modelling techniques to microdata based on sample surveys.

These estimates may be different from the actual characteristics of the population because of sampling and non-sampling errors in the microdata and because of the assumptions underlying the modelling techniques.

The microdata do not contain any information that enables identification of the individuals or families to which they refer.

Contents

Abstract iii

Author note iv

Acknowledgments iv

General caveat iv

1 Introduction 1

2 Defining poverty 1

2.1 The indicator of resources 1

2.2 Equivalence scales 2

2.3 The income unit 3

2.4 The data and time period 4

2.5 The poverty line 4

3 Overview of results 6

3.1 Aggregate child poverty estimates 6

3.2 After housing costs poverty 14

4 Characteristics of children in poverty 16

4.1 Family and household characteristics 16

4.2 Labour force characteristics 20

4.3 Other factors 22

5 Conclusions 25

Appendix A: Detailed tables 27

References 30

1 Introduction

The extent of poverty and inequality remains a topic of enduring interest in Australia and overseas. Growing earnings inequality has prompted renewed debate about the possible creation of marginalisation and social exclusion. In most countries the extent of child poverty is regarded as a particularly important issue, given perceptions of the blamelessness of children and of the impact of poverty on future life chances and the structure of society.

This paper aims to paint a portrait of the extent and characteristics of child poverty in Australian in 1995-96. It is, however, only a preliminary sketch. In future work we hope to examine changes over time rather than at a single point in the mid 1990s; extend the analysis to consider expenditure rather than just income-based poverty measures; and look at the impact of government-provided goods and services.

Section 2 of this paper describes key methodological issues involved when measuring poverty and details the assumptions made in this study. Section 3 provides an overview of the results. Section 4 analyses in more detail the characteristics of the families of children in poverty. Finally, Section 5 summarises the main conclusions.

2 Defining Poverty

Australians generally do not suffer the severe material deprivation evident in some developing countries. This affects our definition of poverty. For us the notion of poverty extends to include not only individuals without food or shelter, but also those whose living standards fall below some overall community standard. This *relative poverty* definition underpins most estimates of the number of Australians in poverty (ABS, 1998).

There is no universally accepted measure of poverty. All of the decisions made by the analyst in defining and measuring poverty are highly debateable.

2.1 The indicator of resources

Like the majority of Australian studies, this study uses the disposable (after-income-tax) cash income of a family as the indicator of their standard of living. However, it must be acknowledged that income is only an imperfect proxy for the standard of living achieved by families. For example, the consumption or expenditure of a family may be viewed as providing a more reliable guide to

their standard of living. Thus, a family may smooth consumption across years or even across the lifecycle, by dissaving during periods of low income and saving during periods of higher income. In addition, for groups suspected of being able to arrange their affairs so as to reduce their reported income, consumption may provide a better indicator of economic resources than income (eg. for the self-employed and millionaires – Bradbury 1996).

Another issue is that non-cash benefits are not included within the 'cash income' measure of resources. Non-cash benefits arise from the usage of government-funded or subsidised welfare services, such as education and health. Previous research has shown that families with children receive higher than average non-cash benefits, so that including such benefits within the measure of resources might change the poverty picture (Harding, 1995, p. 76; Smeeding et al, 1993). Yet including non-cash benefits in the poverty picture is not straightforward (Landt and King, 1996, p. 5).

Yet another problem is that more comprehensive measures of economic well-being may change the story about which groups are most in need. Travers and Richardson, for example, found only a weak correlation between those who were 'poor' on the cash income poverty measure and those who were 'poor' using fuller income measures (1993).

2.2 Equivalence scales

Although the use of equivalence scales is fraught with controversy, there is little choice but to use such scales in poverty analysis. It is unlikely that, for example, a single person with an income of $19,000 suffers from the same degree of poverty as a couple with four children on the same income. A way therefore has to be found to define poverty levels for families of different composition. Typically a poverty line is defined for a benchmark family type, such as a single individual or a couple without children, and then equivalence scales are used to determine comparable poverty lines for other types of families.

Results can vary greatly depending upon the precise equivalence scale used. Two equivalence scales are used in this study. The first, the detailed Henderson equivalence scale, has enjoyed wide usage historically in Australia. This equivalence scale was derived from a survey of household budgets and costs from New York in the 1950s. The second is the OECD scale, which has been widely used internationally. The Henderson detailed equivalence scale gives a weight of one to the first adult in the unit, 0.56 to any second adult, and 0.32 for each child, while the OECD equivalence scale carries a weight of one for the first adult in the unit, 0.7 for any second adult, and 0.5 for each

child.[1] Thus, the OECD scale gives a higher weighting to the needs of second adults and to children, and does not vary with the labour force status of the adults or the age of the children or the adults.

2.3 The income unit

The income unit is the group between whom income is assumed to be equally shared. Possible income units include the individual, the nuclear family, a more extended family, and the household. The precise income unit used can make a major difference to poverty estimates. For example, if a single unemployed 18 year old male still living in the parental home is regarded as a separate income unit, then he is likely to be in poverty. Conversely, if he is regarded as part of the parental income unit, then he is much more likely not to be in poverty.

In this study, the *standard family* estimates employ the ABS definition of the income unit, which means that an income unit is defined as either a couple without dependent children, a couple with dependent children, a sole parent with dependent children, or a single person. A dependent child is defined as a child aged less than 15 or a 15 to 24 year old in full-time study and still living in the parental home. Most of the tables in this study use this definition of the family.

However, because of concerns about the sensitivity of child poverty estimates to the treatment of older non-dependent children, *extended family* estimates have also been provided in some cases. These contain the same four income unit types, but the definition of dependent children has been changed to children aged less than 15 and *all* 15 to 24 year olds still living in the parental home. In this case, any income from the formerly non-dependent children has been added to the parental income and the family's new equivalent income has been calculated. Many such 'non-dependent' children receive support from their parents in the form of cash-transfers, while nearly all receive help in

---

[1] In line with recommendations made by a review committee in 1996, in applying the Henderson scales dependent children aged 18 and over have been given the same weighting as a spouse (ie. they have been treated as adults rather than children). In addition, there is a slight difference in the way that we have defined 'working' for the purpose of assigning equivalence scale points. The original Henderson approach assigned the higher 'working' points to people who were either working full-time, or unemployed and looking for full-time work. In this study, the 'working' points have also been assigned to those who are working part-time and to those unemployed looking for part-time work.

the form of food and accommodation. The full value of these transfers between family members living in the same household is not captured in the standard analysis, and thus the high poverty rates among this group can be deceptive (Landt and Scott, 1998).

After the income unit has been defined, the question arises whether to attribute income to the income unit or to each individual living in that income unit. For example, if the total income of a family consisting of husband, wife and two children is below a poverty line, does this mean that one family is in poverty or that four individuals are in poverty? This study deals with the number of children in poverty, so each child in a family has been ascribed the income of their family (ie. the results are child-weighted not income-unit weighted).

2.4 The data and the time period

The data used for this study came from the combined 1994-96 Survey of Income and Housing Costs (SIHC) confidentialised unit record file, issued by the Australian Bureau of Statistics (ABS.) The survey contained individual records for 27,844 people aged 15 years or more belonging to 17,540 income units. All record are weighted by ABS, so that the results can be grossed up to arrive at estimates for the whole population. The survey was conducted throughout two financial years, but estimates in the earlier 1994-95 financial year have been 'aged' by the ABS. As a result, the estimates for *current weekly income* refer to any week during the 1995-96 financial year. The *period income* estimates refer to annual income during the 1994-95 financial year. Income is defined as 'regular cash receipts' and includes wages and salaries, business and investment income, and government cash transfers such as persions and and family allowance. No amendments have been made to the reported data (eg. negative business incomes have been left unchanged).

The available data thus dictate the time period of the analysis, which essentially captures poverty during a single week or during an entire year. It is likely that longer time periods could result in a different impression of the types of children at greatest risk of poverty.

2.5 The poverty line

The extent of measured poverty is very sensitive to exactly where the poverty line is drawn. The 'head-count' measure of poverty used in this study – which shows the number of children living in families whose income is below a specified poverty line – can shoot up substantially when the poverty line is

raised by only a few dollars. This is because there are large numbers of families dependent on social security in the income ranges where poverty lines are typically drawn.

Four poverty lines have been used in this study. The first is the Henderson poverty line. We have major concerns about the way the Henderson poverty line has been updated over time to match changes in community incomes (Saunders, 1996, p. 333; Mitchell and Harding, 1993). As King recently noted, the Henderson poverty line would now be about 15 per cent lower if the updating method had been amended to take into account the most commonly expressed concerns about it (1998). However, despite our belief that the Henderson poverty line is too high and thus overestimates the extent of poverty in Australia, we have included it in this study because there is such keen interest in it.

The second poverty line used is one which is widely employed internationally, set at *half of the median equivalent family disposable income* of all Australians. Note that using this poverty line means that we are comparing the living standards of children with the living standards of all Australians. (An alternative would be to develop a *child median* poverty line, based on the family incomes of children only (Bradbury and Jantti, 1998). In this case, poor children would be those who had much lower living standards than other children, rather than those who had much lower living standards than individuals generally.) This poverty line still uses the Henderson equivalence scale to calculate the relative needs – and thus the equivalent income – of different types of families. Because the Henderson equivalence scale has still been used, this poverty line can be viewed as being exactly the same as a poverty line drawn at 73 per cent of the usual Henderson poverty line in 1995-96.

The third poverty line is similar to the second, but is set at half of the *average* equivalent family disposable income of all Australians. There are some concerns about the adequacy of the median as a benchmark for community incomes in a world where there has been strong growth in incomes at the top end of the income distribution (Harding, 1997). This poverty line also uses the Henderson equivalence scale, so differs from the second only in that it uses 'half average income' rather than 'half median income' to set the poverty line. As it happens, this poverty line is about 15 per cent lower than the Henderson poverty line, so it provides a reasonable guide to what measured poverty would be if the method of updating the Henderson poverty line were improved.

Finally, a fourth poverty line was used to match many international studies, drawn at half the median equivalent family disposable income but using the

OECD eqiuvalence scale rather than the Henderson equivalence scale. This poverty line thus captures the effect of those different assumptions about the relative needs of children and adults which are implicit in the different equivalence scale.

A final issue is whether to measure poverty before or after families have paid their housing costs. Home purchasers and private renters usually have higher housing costs than outright home owners and public renters. People with similarly low incomes may thus have quite different living standards if their housing costs are very different (King, 1998). To overcome this, the Henderson poverty line includes two sets of poverty lines: before and after housing. To derive after-housing poverty estimates, the housing costs of families are deducted from their after-tax incomes and the results compared with the corresponding after-housing poverty line. Although the other three poverty lines described above are normally applied to 'before-housing' income -- and it is not entirely clear that they can be validly used on an after-housing basis -- they are also applied to after-housing income later in this study.

3 Overview of results

3.1 Aggregate chid poverty estimates

The extent of child poverty is critically dependent upon where the poverty line is drawn. The Henderson poverty line in 1995-96 for a couple with a working head, a non-working spouse, and two children is $434 a week. This is after the payment of income tax, but before housing costs are met. Using this poverty line, an estimated 24.7 per cent of all dependent Australian children are in poverty (Table 1).[2]

As noted earlier, there are grounds for believing that the Henderson poverty line is set too high. If half of the income of the *average* person in Australia in 1995-96 is used to define the poverty line, then the line is $360 a week and an estimated 12.8 per cent of Australian children are in poverty. This poverty line amounts to about 83 per cent of the Henderson poverty line, and is thus close to where experts believe the Henderson poverty line would now fall if the method of updating it was improved.

---

[2] As noted earlier, a dependent child is defined as a child aged less than 15 years or aged 15 to 24, studying full-time and still living with their parents.

Table 1 **Estimates of Child Poverty Using Eight Different Poverty Lines, Standard Family Definition, 1995-96.**

Type of Poverty Line	Level of Poverty Line $ pw	Poverty Estimates - Rates (%) and Number ('000)				
		All dependent children	All dependent children – non-self employed	All children aged < 15	All children aged 15 to 18	Non-dependent children [a]
Current income						
Henderson Current	$434	24.7% 1,187	21.5% 850	25.8% 1,017	21.3% 146	30% 251
Half Average Current	$360	12.8% 612	13.6% 654	13.4% 527	10.9% 75	23.0% 189
Half Median Current	$318	8.4% 403	9.1% 438	8.9% 345	7.0% 48	20.2% 169
OECD Current	$335	11.3% 544	12.1% 581	12.2% 480	7.8% 54	21.5% 180
Annual incomes						
Henderson Period	$410	23.7% 1,081		24.7% 920	21.0% 143	40.1% 335
Half Average Period	$353	16.3% 780		17.1% 675	13.6% 93	35.9% 301
Half Median Period	$316	12.1% 579		12.8% 505	9.3% 64	32.6% 273
OECD Period	$330	14.4% 692		15.7% 619	9.4% 64	33.7% 282

[a] Non-dependent children are 15 to 24 years olds who are not full-time students, but still live with their parents.
Source: The ABS 1994-96 Survey of Income and Housing Costs.

If the poverty line is set at half of the income of the *middle* person in Australia in 1995-96 the poverty line is $318 a week. This is obviously much lower than the Henderson poverty line and, not surprisingly, results in a correspondingly lower dependent child poverty rate of 8.4 per cent.

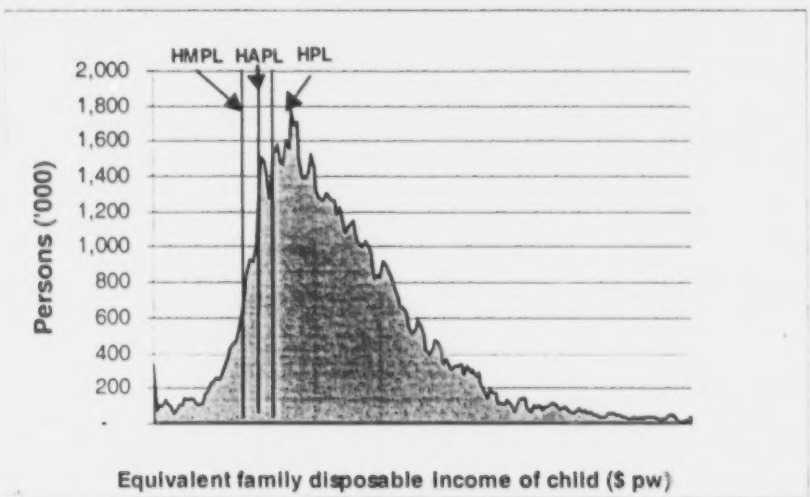
The final poverty line used, the OECD poverty line, is similar to the preceding poverty line in that it draws the poverty line at half of the income of the

middle (ie. median) person in Australia. However, it uses an entirely different equivalence scale to the first three poverty lines, so is not directly comparable. Nonetheless, the resulting poverty line for a couple with two children is $335 a week in 1995-96, which means that it falls between the previous two poverty lines (Table 1).

Figure 1 shows the equivalent family income of all dependent children in Australia, along with the first three poverty lines. The concentration of people living in families with incomes at the Henderson poverty line largely comprises those whose principal current income source is government cash benefits. The concentration at the very much lower 'half median' poverty line largely comprises couples with children with wages and salaries as their principal source of weekly income. At the 'half average' poverty line, there is a mix between those dependent on government cash benefits and those with earned income. Figure 1 illustrates clearly the clustering of families with children in these lower income ranges, which in turn explains why the child poverty rate falls so sharply as the poverty line moves down.

The major peaks on the graph in these poverty line ranges represent social security recipients with little or no private income. This is because the main social security payments range between about 85 and 120 per cent of the poverty

Figure 1 **Estimated distribution of the equivalent family disposable weekly income of dependent children, 1995-96.**



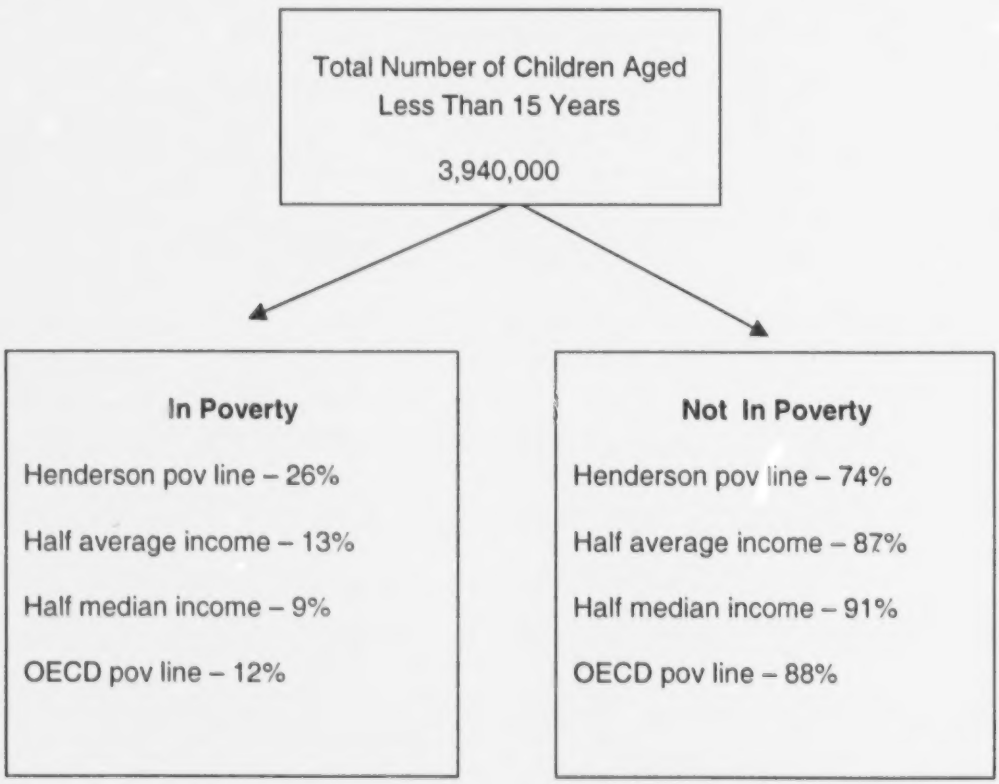
Note: People without dependent children have been excluded from this population distribution.
Note: HPL = Henderson Poverty Line, HMPL = Half Median Poverty Line, and HAPL = Half Average Poverty Line
Data source: The ABS 1994-96 Survey of Income and Housing Costs.

lines, depending on the type of payment and the particular circumstances of individuals. The jagged pattern of the graph reflects particular payments received by a large number of families. Both the higher and lower peaks are made up of approximately three-quarters couples with children and one-quarter single parents.

Looking at younger children

Many feel that child poverty among younger children is more worrying than that among older children, who potentially can earn an income and look after themselves. Figure 2 presents child poverty estimates for children aged zero to 14 years. Using the Henderson poverty line, about one-quarter of all such children are in poverty. Using the possibly more reliable 'half average income' poverty line, 13 per cent of all 0 to 14 year olds are in poverty. This amounts to just over half a million younger children (527,000).

Figure 2 **Poverty Estimates for Children Aged Less Than 15 Years**


Total Number of Children Aged Less Than 15 Years
3,940,000
In Poverty
Henderson pov line – 26%
Half average income – 13%
Half median income – 9%
OECD pov line – 12%
Not In Poverty
Henderson pov line – 74%
Half average income – 87%
Half median income – 91%
OECD pov line – 88%

Looking at all children aged 15 to 18

What about older children? One problem with the figures presented in the first column in Table 1 is that they apply only to dependent children. While the final column presents estimates for non-dependent 15-24 year old children still living at home, this still leaves a third group of children – those who have left their parents' home. In looking at this group, it is not entirely clear when a child commences being an adult (and should thus be more approrpriately included in estimates of adult poverty). As an interim measure, this section looks at the poverty risks faced by all children aged 15 to 18 years.

As Figure 3 shows, according to the ABS data there were just under one million 15 to 18 year olds living in private dwellings in 1995-96. About two-thirds of these were dependent children still studying full-time and living with their parents. Of the three groups considered, this group faced the lowest poverty risk. Using the 'half average income' poverty line, 11 per cent of such dependent 15 to 18 year olds were found to be in poverty. The estimate using the traditional Henderson poverty line was double this, while those using the other two poverty lines were lower.

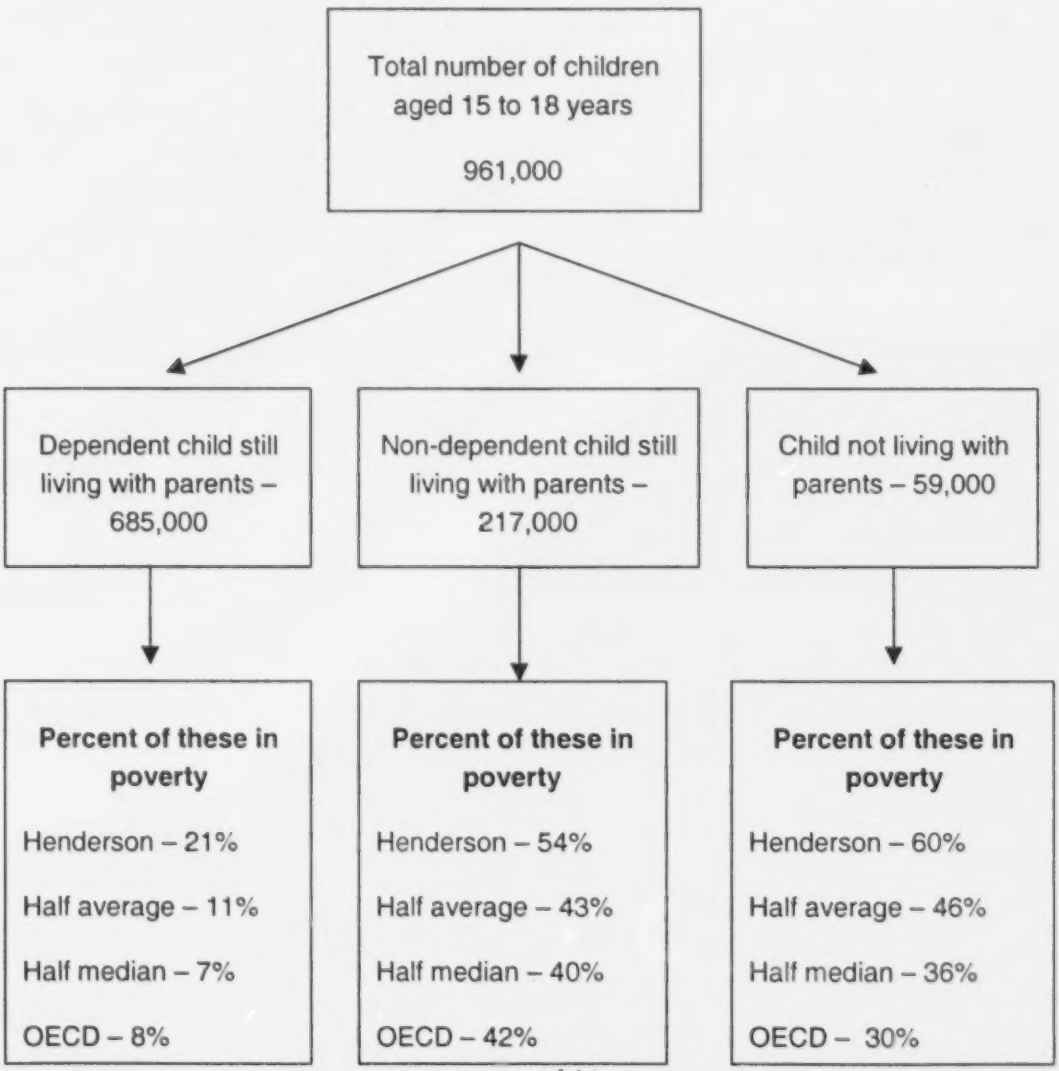
A further one-fifth of all 15 to 18 year olds were still living with their parents but were classified by the ABS as non-dependent because they were not in full-time study (eg. they were unemployed, working or not in the labour force). The apparent poverty rates of this group were very high, ranging between 40 and 50 per cent for all four of the poverty lines used. But this picture of extreme poverty risk may not be all it seems, because the low incomes of this group may disguise very substantial transfers from their parents. Such transfers may include food and very probably include food and accommodation. Despite this, low income is presumably an important issue for those young adults who are unemployed or have only managed to find part-time work.

Finally, about one in every twenty 15 to 18 year olds had left the parental home. This means that the sample size for this group is reasonably small and that the estimates should thus be treated with some caution. With this caveat in mind, for two of the poverty lines used this group has the highest poverty rates of any of the three groups of 15 to 18 year olds. For example, using the 'half average income' poverty line, almost half of those 15 to 18 year olds who had left the parental home were in poverty. While it is probably true that some of this group still receive assistance from their parents, this still appears to suggest a very high level of disadvantage.

Estimates of the child poverty rate for *all children aged 18 years or less* can also be calculated. Thus, according to the ABS, there were 4.9 million children

aged 0 to 18 years in Australia and living in private dwellings. Using the 'half average income' poverty line, an estimated 15 per cent of all these children – 724,000 – were living in poverty. This is a higher poverty rate than the 12.8 per cent rate shown in Table 1 for all dependent children. There are two reasons for this. First, all dependent children aged 19 and over are excluded from the '18 years or less' estimate but not from the estimate in Table 1. Second, the '18 years or less' estimate has been widened to include non-dependent children living at home and those who have left the parental home. As Figure 3 demonstrates, these two groups have higher poverty rates than those dependent children who still live at home. As a result, broadening the focus to look at all children aged 18 or less results in a higher poverty rate than just looking at those dependent children still living at home.

Figure 3 **Estimated Poverty Rates Among 15 to 18 Year Old Children, 1995-96**


Total number of children aged 15 to 18 years
961,000
Dependent child still living with parents – 685,000
Non-dependent child still living with parents – 217,000
Child not living with parents – 59,000
Percent of these in poverty
Henderson – 21%
Half average – 11%
Half median – 7%
OECD – 8%
Percent of these in poverty
Henderson – 54%
Half average – 43%
Half median – 40%
OECD – 42%
Percent of these in poverty
Henderson – 60%
Half average – 46%
Half median – 36%
OECD – 30%

Non-dependent children

Non-dependent children are defined by the ABS as those aged 15 to 24 and still living at home but not in full-time study. They may therefore be working, be unemployed or not in the labour force. There is often concern that the poverty rates of this group may be overstated, because their low incomes may disguise very substantial transfers from their parents. The final column in Table 1 shows what the apparent poverty rates of such non-dependent children are. As expected, their apparent poverty rates are very high, ranging from 20 to 40 per cent depending upon the exact poverty line used.

it can be argued that the magnitude of assistance from parents to children still living in the parental home is so great that such children should be regarded as part of their parent's income unit rather than as a separate income unit. Table 2 shows what the impact of such a redefinition would be upon the extent of child poverty in Australia. The risk of child poverty is somewhat reduced once the income of non-dependent children is added to their parents income and whether or not the family is in poverty is then reassessed.

The average and median incomes of families are somewhat higher, once the large numbers of non-dependent single people on low incomes are added into their parents' income units. Yet, despite this, all of the poverty measures show a slight decrease in child poverty once the definition of child is expanded to include all 15 to 24 year olds still living in the parental home. This suggests that the additional income added to the family income by the formerly 'non-dependent' children is sufficient to outweigh the impact of having an extra mouth to feed. Because the Henderson equivalence scale implies economies of scale, a couple with two dependent children and a non-dependent child living with them are assumed to require more income to survive than a couple with three dependent children.

Table 2 **Estimates of Child Poverty Using Four Different Poverty Lines, Extended Family Definition, 1995-96**

Poverty Line	Weekly Income	Poverty Estimates - Rates (%) and Number ('000)	
		All children aged less than 25 still living in parental home	All children aged less than 15 still living in parental home
Henderson Current	$434	21.4% 1,167	25.1% 933
Half Average Current	$365	11.5% 626	13.4% 498
Half Median Current	$328	8.1% 444	9.5% 354
OECD Current	$352	11.1% 606	13.8% 515

Source: The ABS 1994-96 Survey of Income and Housing Costs.

Lengthening the time period

Table 1 shows the child poverty estimates based on the weekly income of their parents (the *current* income poverty lines) and those based on the annual income of their parents. Normally one might expect poverty to be lower over the course of an entire year, as weekly fluctuations in income ironed themselves out. However, according the ABS data this was not the case in the mid 1990s, with the poverty rates for weekly 1995-96 income being the same as or lower than the poverty rates based on annual 1994-95 income. This surprising result is being further investigated with the ABS. For the moment, however, the remaining analysis concentrates on the weekly poverty results.

Excluding the self-employed

There are often concerns about whether the reported incomes of self-employed families accurately reflect their standard of living. Table 1 also shows the estimated extent of current child poverty once all dependent children living in families where one or more parents are self-employed are excluded. Analysis using the Henderson poverty line usually excludes the self-employed from its scope, and Table 1 shows that doing so reduces the child poverty rate from 24.7 per cent to 21.5 per cent. Thus, excluding the self-employed results in a three percentage point reduction in the child poverty rate using the Henderson poverty line (which does not change when the self-employed are excluded).

The impact using the other three poverty measures is, however, quite different. When children living in self-employed families are excluded, the poverty line is recalculated as half of the average or median income of the remaining non-self-employed families. Because self-employed families have lower than average incomes, excluding them results in a slightly higher poverty line. As a result, child poverty rates are higher for children in non-self-employed families than they are for children generally. For example, using the 'half average income' poverty line, the poverty rate among dependent children in non-self-employed families is 13.6 per cent, in contrast to the 12.8 per cent recorded for all dependent children (Table 1).

3.2 After-housing costs poverty

As noted earlier, another area of continuing debate is the impact of housing costs upon poverty. The nub of the problem is that home purchasers and private renters typically have higher housing costs than home owners and public renters. People with similarly low incomes may thus have quite dissimilar standards of living if their housing costs are very different. There is thus a case for examining poverty rates based on disposable income after housing costs have been met. On the other hand, it can be argued that housing costs are to some extent discretionary and that high housing costs can sometimes represent high levels of saving (via mortgage repayments) rather than high unavoidable costs. There is also some question about whether the same 'unavoidable costs' principle should not be extended to other items, such as mandatory child support payments or child care costs (Citro and Michael, 1995).

Housing is, however, a very significant component of most families' budgets and a necessity of life. Previous research has shown that using an after-housing measure of poverty is likely to make an important difference to child poverty estimates, because couples with children have higher than average housing costs while sole parents have lower than average costs (Landt and King, 1996, p. 5).

Looking just at all dependent children and using the Henderson poverty line, the estimated rate of child poverty rises from 25 to 26 per cent as the basis of assessment shifts from 'all-costs' poverty to 'after-housing' poverty. This does not seem like a significant move. But there is a major flaw with the assumed cost of housing which is implicit within the Henderson equivalence scale. In essence, it appears that the cost of housing used in the Henderson scales and based on price relativities in the 1950s is too low compared with the cost of housing for low income groups in Australia today. For example, an

examination of those who fall below the Henderson before-housing poverty line in 1995-96 shows that the Henderson scales assume that such families spend 26 per cent of their average disposable income of $170 a week on housing. In fact, according to the ABS data, they spend 33 per cent of their disposable income on housing (ie. $56). The problem is even more acute at slightly lower income levels. For example, those who fall below a poverty line set at 90 per cent of the standard Henderson poverty line are assumed to spend 25 per cent of their disposable income of $139 a week on housing – yet they actually spend 42 per cent.

It is not entirely clear, however, that the other three poverty lines used in this study can be validly used on an after-housing basis.[3] Suppose, however, just to get a feel for the extent of the problem, that we set a poverty line at half of the average *after-housing* equivalent income of families, rather than half of the average *before-housing* income as we have done until now. In this case the dependent child poverty rate is more than 50 per cent higher, at 21 per cent (rather than 13 per cent as on the before-housing basis). A similar pattern is evident for the other poverty lines (Table 3).

Further analysis of the results suggests that the after-housing poverty rates of those 15 to 18 year olds who have left the family home are also higher than their before-housing poverty rates. For example, using the 'half average income' poverty line, they rise from 46 to 57 per cent as the basis of comparison shifts from before to after-housing poverty.

This suggests that the extent of child poverty in Australia is greater once account is taken of housing costs. Thus, if we look at the amount of money that children's families have left to spend to meet all of their other needs after paying for housing costs, then more children are relatively deprived. Examining child poverty on a before-housing costs basis therefore appears to underestimate the real extent of child poverty. Because of methodological doubts about how accurately we can measure after-housing poverty, the rest of the results in this paper are on a before-housing basis. But it does appear that these estimates probably understate the real extent of child poverty.

---

[3] The reason for this is quite technical. Because the Henderson equivalence scale is still used when calculating after-housing equivalent income, and this is then used in defining the 'half average' and 'half median' after-housing equivalent income poverty lines, then the inaccuracies within the Henderson equivalence scale costs for housing are still perpetuated. In the case of the OECD scale, it is not clear that the same OECD scale can be validly applied to both before and after-housing income.

Table 3: Estimated before and after-housing child poverty rates, 1995-96

Poverty Line	Weekly Income	All dependent children		Dependent children aged < 15	
		Before-housing	After-housing	Before-housing	After-housing
Henderson Current	$434	25	26	26	28
Half average current	$410	13	21	13	22
Half median current	$328	8	16	9	17
OECD current	$322	11	18	12	20

Source: The ABS 1994-96 Survey of Income and Housing Costs.

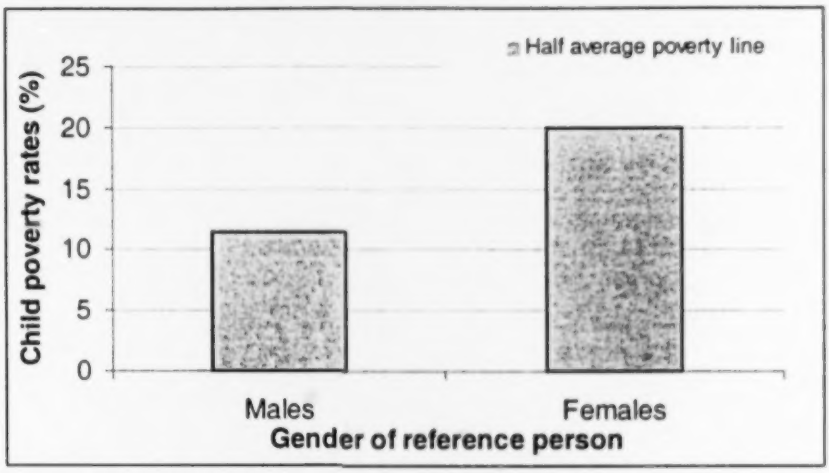
4 Characteristics of children in poverty

What types of children were most at risk of being in poverty in 1995-96? All of this section deals only with dependent children (ie. those still living with their parents and who meet the ABS definition of dependency). While full results for all of the four current income poverty lines are in Appendix 1, the discussion in this section concerns the results for the 'half average income' poverty line only.

4.1 Family and household characteristics

Children who live in a family headed by a women are about twice as likely to be in poverty as those headed by a man (Figure 4). In the overwhelming majority of cases, their mothers are sole parents. Yet despite this, because so many more families are headed by a man, three-quarters of all children in poverty live in families headed by a man.

Figure 4 **Child poverty rates by gender of the reference person**

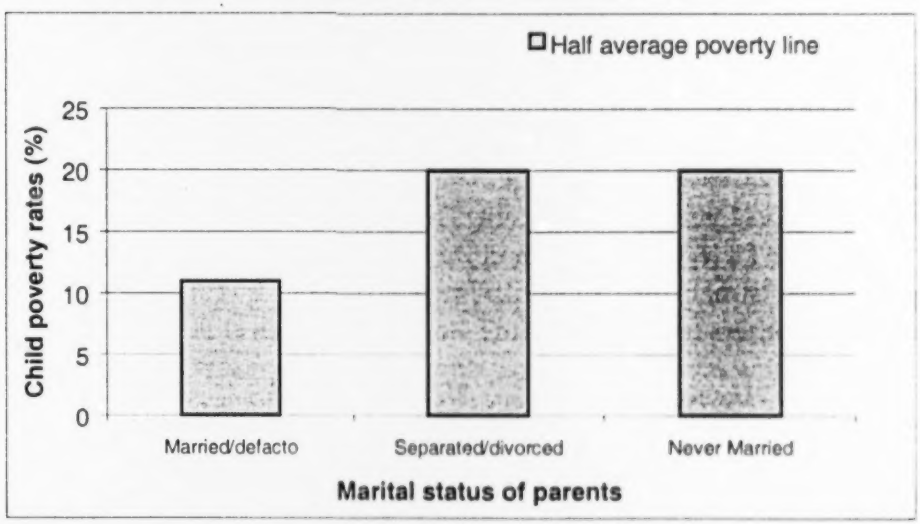


Data source: The ABS 1994-96 Survey of Income and Housing Costs. Appendix A, Table A1

Most children in poverty still live with both of their parents (Appendix A, Table A1). But the risk of being in poverty is very much greater if their mother (or less often, their father) is a sole parent (Figure 5). In three-quarters of such cases they come from a formerly intact family, and their mother or father is now separated or divorced. Only one in every 20 children in poverty lives with a never-married parent. Children in intact families face about half the risk of being in poverty of children in sole parent families.

The vast majority of poor children live in families with a head aged between 30 and 44 years. As Figure 6 shows, the risk of being in poverty while parents are in these peak working years is actually relatively low. The high numbers

Figure 5 **Child poverty rates by marital status of parents**

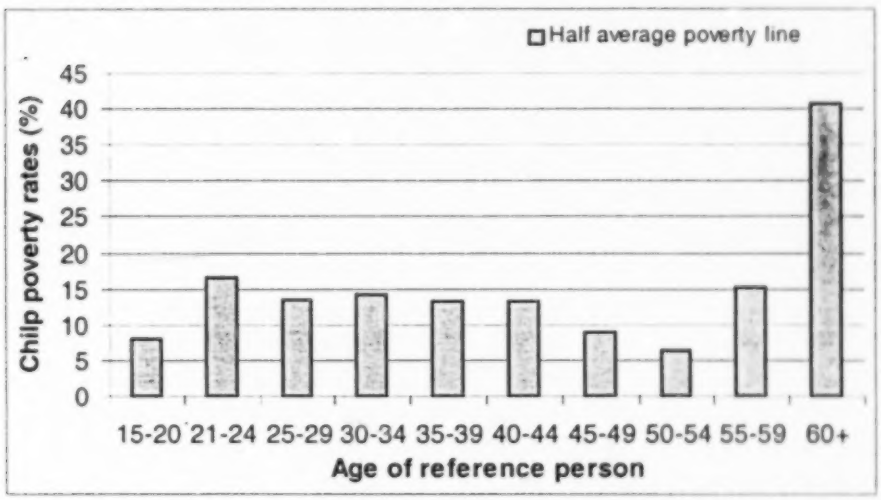


Source: The ABS Survey of Income and Housing Costs. Appendix A, Table A1

BEST COPY AVAILABLE

arise because there are just so many families with children in these parental age ranges. Conversely, the risk of being in poverty if you have a parent aged 60 or over is very high but, because there are so few families in this situation, the number of such poor children is very low (Appendix A, Table A1).

Figure 6 **Child poverty rates by age of the reference person**



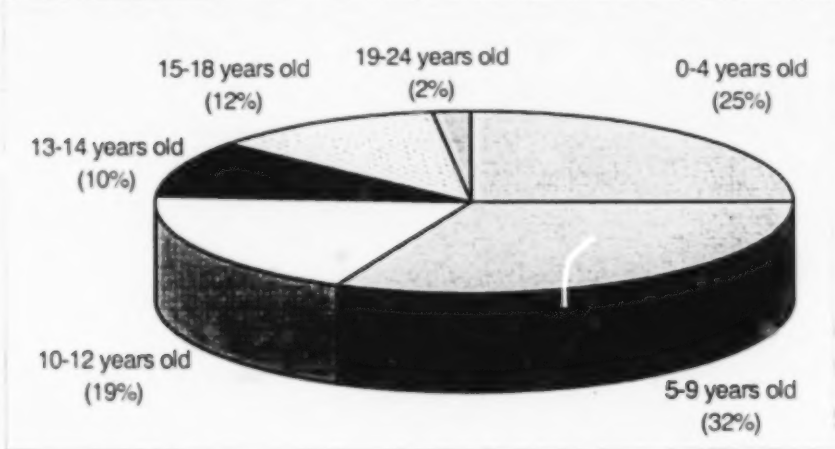
Data source: The ABS Survey of Income and Housing Costs. Appendix A, Table A1

Number and age of children in a family

Does the risk of being in poverty change as children grow older? Our study suggests that children are most likely to be in poverty when they are younger. As Figure 7 indicates, about one-quarter of all dependent children in poverty are aged less than five years old, while three-quarters are aged less than 13 years old.

Younger children also face the greatest likelihood of being in poverty. Children aged five to 12 years face a 15 per cent risk of being in poverty. This figure gradually decreases as children age. The lowest poverty rates are found in children aged 19 to 24 years, at 6 per cent. This is presumably partially explained by lifecycle factors, as younger children generally have parents at earlier stages of their careers and thus with lower earnings. It is also often more difficult for mothers to work full-time – or at all – when children are younger.

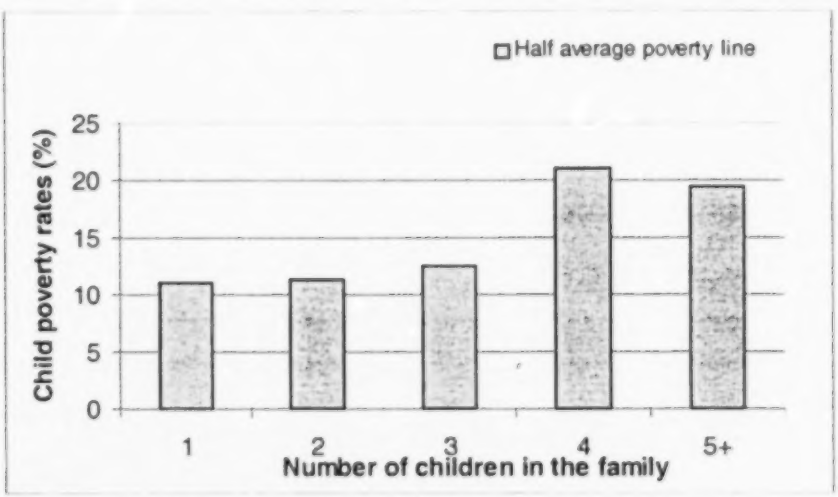
Figure 7 **Proportion of all children in poverty by age of child**



Data source: The ABS Survey of Income and Housing Costs. Appendix A, Table A1

Figure 8 shows that poverty rates increase as the number of children in the family increases. Generally speaking, the risk of poverty seems to increase sharply once families have more than three children. The lowest child poverty rates are found among families with one or two children (11 %). The poverty risk for families with four children or more is roughly double this, at about 20 per cent.

Figure 8 **Child poverty rates by number of children in the family**



Data source: The ABS Survey of Income and Housing Costs. Appendix A, Table A1

BEST COPY AVAILABLE

4.2 Labour force characteristics

Perhaps the principal factor influencing the likelihood of a child being in poverty in Australia is the labour force status of their parents. Children living in a family where there are no parents earning an income face a one in three chance of being in poverty. The risk of being in poverty plummets dramatically once one or both parents are working, to less than 10 per cent (Figure 9).

Perhaps surprisingly, however, the majority of those children living in poverty in Australia do have one or two parental earners in their family (330,000 vs 284,000 with zero parental earners- Appendix 2, Table A2). Further examination suggests that 236,000 of those children in poverty come from families where one or both parents are self-employed. As mentioned earlier, while there is no doubt that many self-employed families do experience great financial hardship, there is also some concern that the income of such families may not always accurately reflect their standard of living.

Looking just at children living in families where one or both parents earn wages and salaries, 157,000 poor children live in such families.[4] Thus, up to about 25 per cent of poverty among Australian children may be at least partly attributable to the fact that their parents belong to the working poor. For two-thirds of these children (ie. 65,000), their parents are also low wage earners, in the sense that they earn less than $10 an hour. For the remainder, low weekly wages may be more often attributable to a reduced number of hours worked rather than a low hourly wage. (In other cases, a reasonable weekly wage may not be sufficient to pull a larger family out of poverty, with poverty thus being due more to family size than to a low wage.)

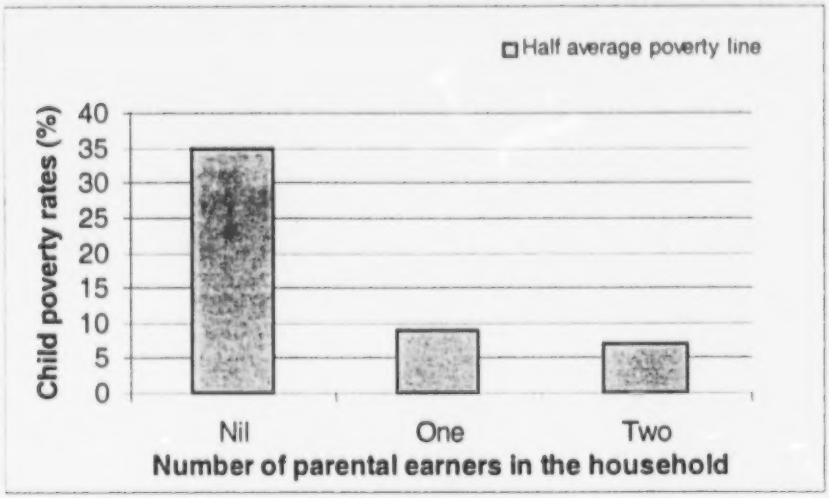
Figure 10 confirms that many parental earners work only part-time or do not earn sufficient to make earned income the major source of income for their family. More than half of Australia's poor children live in a family dependent upon government cash benefits (such as unemployment payments or sole parents pension). Children living in families reliant on government cash benefits face a very high probability of being poor, with one in three falling

---

[4] When the 157,000 children living in a family where at least one parent earns wage income are added to the 236,000 children living in a family where at least one parent is self-employed, the result is more than the 330,000 children who live in a family with one or two parental earners. The reason for this, of course, is that some children live in a family where one parent is a wage and salary earner and the other is self-employed.

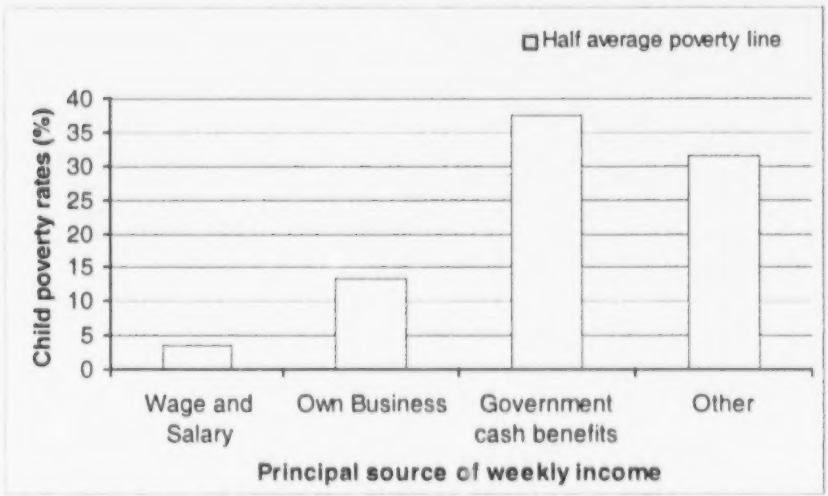
below the poverty line. In contrast, only a minority of poor children live in families where either wages and salaries or business income (from self-employment) are the principal income source.

Figure 9 **Child poverty rates by number of parental earners**



Data source: The ABS Survey of Income and Housing Costs, Appendix A, Table A2

Figure 10 **Child poverty rates by principal source of weekly income**



Data source: The ABS Survey of Income and Housing Costs, Appendix A, Table A2
Note: 'Other' includes incomes from partnerships, superannuation, interest, dividends, bonds and rent.

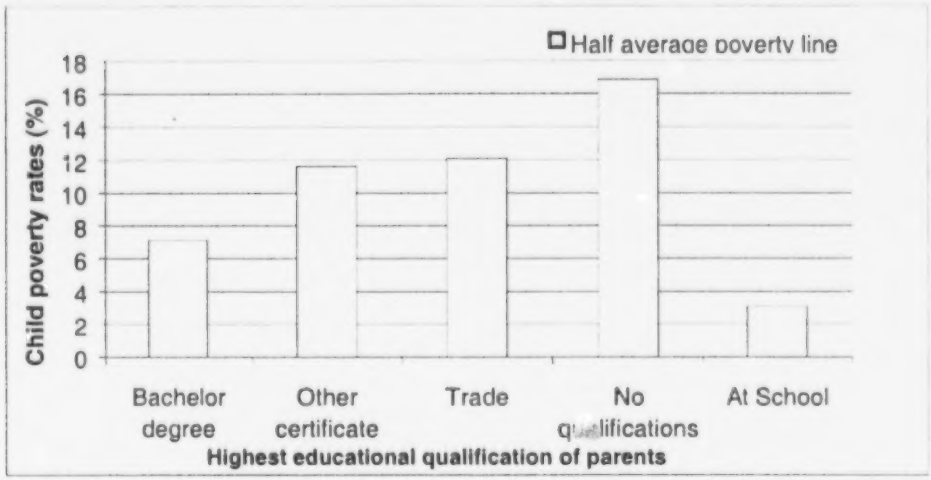
Education

The link between education and the likelihood of children being in poverty is less pronounced than that for the number of parental earners, but still clearly exists. As one might expect, children living in families where the parents have

no educational qualifications are twice as likely to be in poverty as children living in families where one or both of the parents is a graduate (Figure 11). Just over one in every 10 children living in a family where the highest parental qualification is a trade or other certificate or diploma is in poverty.

Children who live with parents or guardians who have not completed high-school have a greater chance of not finishing higher education than children of highly educated parents. A study on entering higher education in the 1980s found that more children from professional backgrounds complete year 12 than do unskilled. Moreover it found that the poorest 25 per cent of students were 33 per cent under-represented, whereas the richest were 66 per cent over –represented (Travers, 1998).

Figure 11 **Child poverty rates by highest educational qualification of parents**



Data source: the ABS 1995-96 Survey of Income and Housing Costs, Appendix A, Table A2

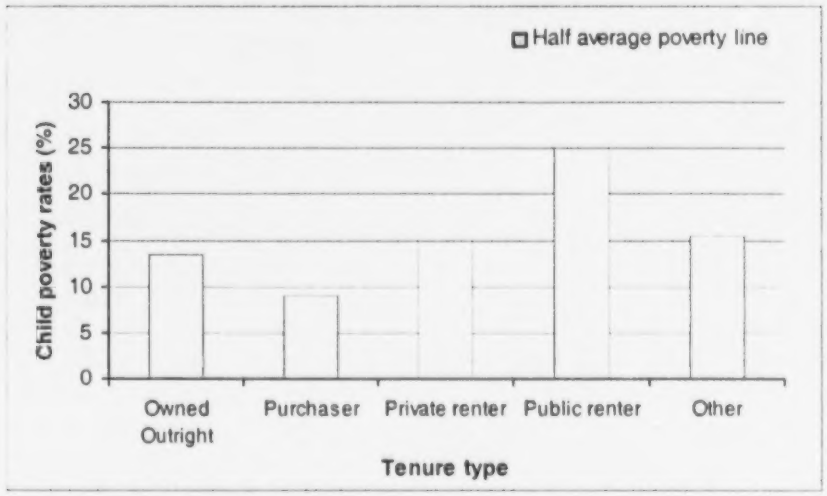
4.3 Other factors

Housing and state of residence

Children living in families who rent from public housing agencies face a higher risk of being in poverty than the other four tenure types examined, at 25 per cent. Children living in families renting in the private rental market face a substantially lower 15 per cent chance of being in poverty. The very significant increases in and extensions in coverage for rent assistance for families with children during the past 15 years can be expected to have reduced the poverty risk of such families. Today, the child poverty risk faced by owner-occupiers is only slightly lower than that faced by private renters.

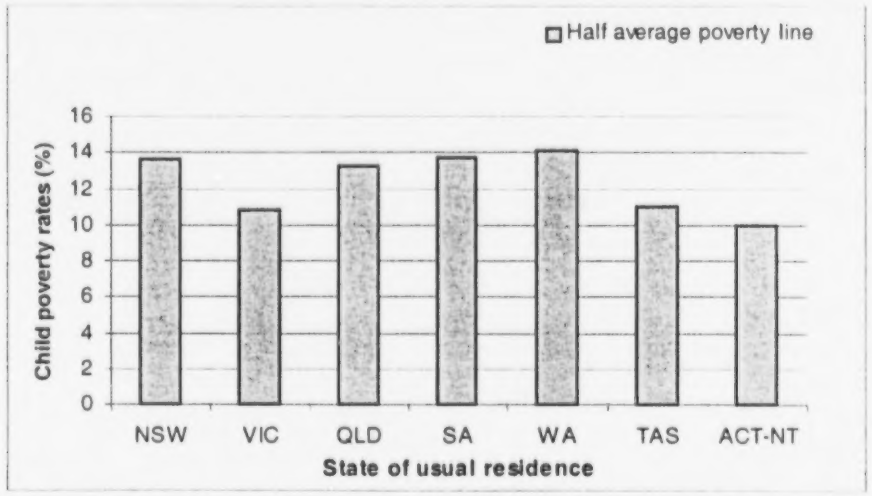
Perhaps surprisingly, over one-quarter of all poor children live in families who are outright owners of their homes. Another 30 per cent of poor children live in families who are still paying off their mortgage, so that a slight majority of all poor children live in families that have already bought or are buying their homes. Further examination of the data, however, suggested that half of children in both the 'owned outright' and 'purchaser' group were living in self-employed families – a picture which does not reflect the overall averages for Australia.

Figure 12 **Child poverty rates by tenure type**



Note: Other includes rent-free and board-free.
Data Source: The ABS Survey of Income and Housing Costs. Appendix A, Table A3.

Figure 13 **Child poverty rates by state of usual residence**



Data source: The ABS Survey of Income and Housing Costs, Appendix A, Table A3.

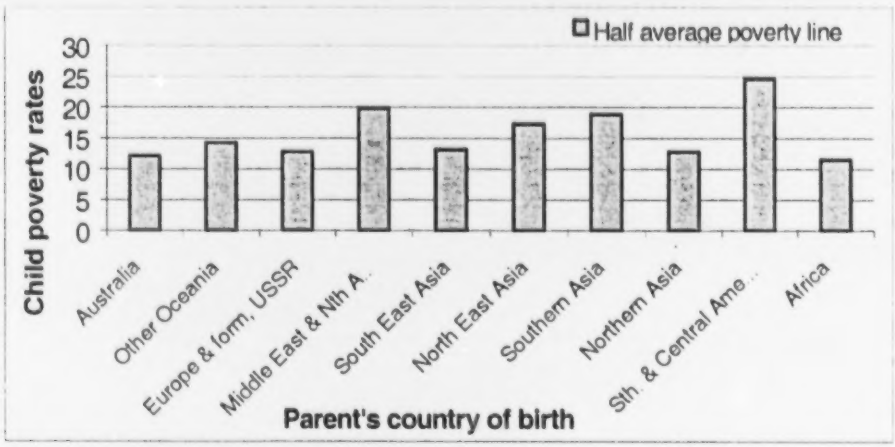
BEST COPY AVAILABLE

The risk of being in poverty varies slightly by state of residence (Figure 13 and Appendix A, Table A3). A child in the ACT or Northern Territory has a one in 10 chance of being in poverty. (These two territories cannot be separated in the ABS data.) A child living in NSW, South Australia or Western Australia has about a one in seven chance of being in poverty.

Immigration

In the vast literature on immigration in Australia a relatively neglected area has been the degree of poverty and disadvantage among immigrant groups, and the impact it has on their children (although see Taylor and McDonald, 1996). Figure 14 suggests that the children of migrants from Asia generally face a poverty risk which is about one-third to one-half greater than that for children with Australian-born parents. The highest child poverty rates are among immigrants of South and Central America, Middle Eastern and Northern Africa background. The poverty rates among these groups reaches as high as 25 per cent. Despite the higher poverty rates among children whose family head was born overseas, two-thirds of all children in poverty had an Australian born family head.

Figure 14 **Child poverty rates by head parent's country of birth**

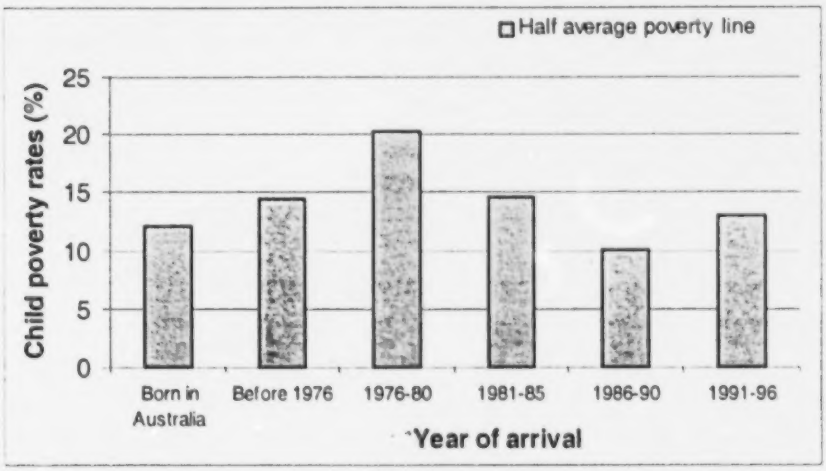


Data source: The ABS Survey of Income and Housing Costs, Appendix A, Table A3

Our study also found that the highest poverty rates among children of immigrant parents were among families who arrived in Australia before 1981. (Figure 15). This might reflect the changing balance in Australia's immigration policy since 1980 between domestic, humanitarian and international, and economic criteria leading to growing numbers of 'skilled' immigrants who have a higher likelihood of success in the Australian labour market.

BEST COPY AVAILABLE

Figure 15 **Child poverty rates by head parent's year of arrival**



Data source: The ABS Survey of Income and Housing Costs, Appendix A, Table A3

5 Conclusions

This study has reported the extent of child poverty in Australia, using four different poverty lines. The Henderson poverty line is believed to be too high, due to an inadequate method of updating it to changing community incomes, and is thus believed to overstate the extent of child poverty. A poverty line set at half of the family income of the average person in Australia has been used to derive most of the results presented in this paper.

Using this poverty line, an estimated 12.8 per cent of all dependent children in Australia are in poverty – 612,000 children. (Dependent children are those aged 0 to 14 years and those aged 15 to 24 years engaged in full-time study and still living with their parents.) If the focus is narrowed to consider only 0 to 14 year olds, an estimated 13.4 per cent are in poverty – 527,000 children.

Most of this study concentrated on the circumstances of dependent children. However, analysis of the circumstances of another group – those children aged 15 to 18 years old who had left the parental home – suggested that they had very high poverty rates of about 46 per cent.

This study suggests that the average dependent child in poverty in Australia:

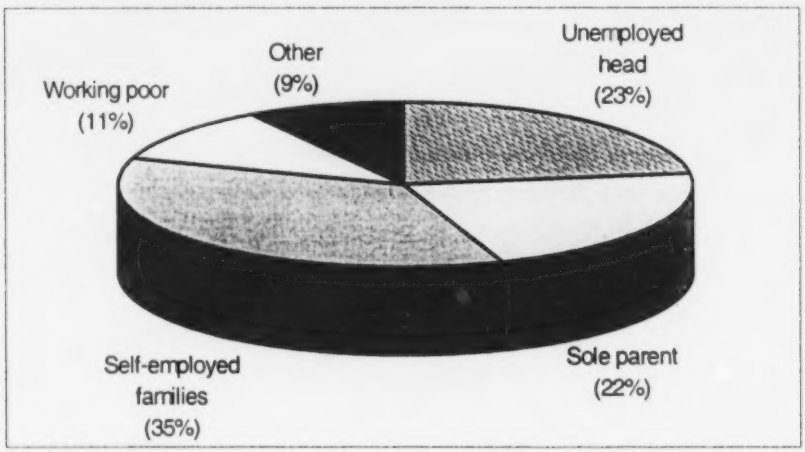
- lives with both of their parents, both of whom have no educational qualifications;
- is aged less than 13 years;
- lives with one or two brothers or sisters;

- has Australian born parents who have bought or are buying their own home;
- has at least one parent who is earning income, but with earnings being low due to (primarily) self-employment or (less often) low wages; and
- lives in a family whose principal income source is government cash benefits.

The impact of the labour force and sole parent status of the parents of poor children is critical. Combining employment and family characteristics allows us to group almost all poor children into one of four categories, as shown in Figure 16. Essentially, a child is poor in Australia because either:

- the head of their family is unemployed;
- the head of their family is a sole parent;
- one or both of their parents is self-employed; or
- one or both of their parents earns wages and salaries but is part of the 'working poor'. Two-thirds of all those belonging to this group have a parent who is a 'low wage earner', earning less than $10 an hour.

Figure 16 **Why children are in poverty.**



Note: Children have been assigned to these categories by placing them in the first category that they fit. For example, a child with an unemployed sole parent mother is assigned to the 'head unemployed' category, while a child with a sole parent mother who has a part-time wage and salary job is assigned to the 'head is sole parent' category. This is why the number of children in working poor families does not match the estimates given at the beginning of Section 4.2. In summary, those earlier estimates showed the total number of children where one or both parents earned any wage or salary income. The 'working poor' group above is the residual, of children whose wage earning parents did not fit any of the preceding categories.

Appendix A: Detailed tables

Table A1 **Child poverty rates by 'family and household characteristics', Henderson, half average, half median and OECD poverty lines: 1995-96**

	Henderson poverty line		Half average poverty line		Half median poverty line		OECD poverty line	
	Number '000	Poverty rates (%)	Number	Poverty rates (%)	Number	Poverty rates (%)	Number	Poverty rates (%)
Gender of reference person								
Male	889	75	473	12	318	8	372	9
Female	298	25	139	20	85	12	171	25
Age of reference person								
15-20	8	36	2	8	1	5	4	17
21-24	45	41	18	17	11	10	19	17
25-29	96	25	52	14	37	10	61	16
30-34	264	31	122	14	82	10	124	15
35-39	295	24	163	13	101	8	126	10
40-44	247	23	143	13	98	9	121	11
45-49	135	19	64	9	45	6	50	7
50-54	56	20	18	6	11	4	12	4
55-59	20	25	12	15	8	10	9	12
60+	22	50	18	41	9	20	17	39
Marital status of parents								
Married or de-facto	859	21	455	11	309	8	358	9
Separated or divorced	241	41	119	20	73	12	133	23
Never married	87	46	38	20	20	11	52	27
Child's age group								
0-4 years old	318	24	155	12	109	8	163	12
5-9 years old	365	28	196	15	131	10	174	13
10-12 years old	218	28	115	15	71	9	94	12
13-14 years old	117	22	61	12	37	7	49	9
15-18 years old	146	21	75	11	48	7	54	8
19-24 years old	24	13	10	6	6	4	10	6
Number of children in the family								
One	175	20	96	11	65	7	79	9
Two	397	20	225	11	148	7	190	10
Three	347	27	161	12	112	9	147	11
Four	175	39	95	21	62	14	91	20
Five or more	93	52	34	19	17	9	37	21

Source: The ABS 1994-96 Survey of Income and Housing Costs.

Table A2 **Child poverty rates by labour force characteristics, Henderson, half average, half median and OECD poverty lines: 1995-96**

	Henderson poverty line		Half average poverty line		Half median poverty line		OECD poverty line	
	Number '000	Poverty rates (%)	Number '000	Poverty rates (%)	Number '000	Poverty rates (%)	Number '000	Poverty rates (%)
Number of parental earners in the household								
Nil	551	68	284	35	166	21	293	36
One	356	20	174	9	124	7	144	8
Two	280	13	156	7	113	5	106	5
Principal source of current weekly income								
Wage and salary	314	10	113	4	68	2	78	2
Own business	121	25	65	13	41	8	45	9
Government cash benefits	683	69	370	37	232	23	358	36
Other [a]	28	38	23	31	22	30	23	30
Highest education qualification of parents								
Bachelor degree	104	11	70	7	53	6	58	6
Other certificate or diploma	133	20	77	12	58	9	60	9
Trade	317	23	169	12	113	8	145	10
No qualification	633	36	296	17	179	10	280	16
At school	0	0	0	3	0	3	1	3

[a] 'Other' includes incomes from partnerships, superannuation, interest, dividends, bonds and rent. Some families had zero income and thus did not have a principal income source.
Source: The ABS 1994-96 Survey of Income and Housing Costs

Table A3 **Child poverty rates by other factors, Henderson, half average, half median and OECD poverty lines: 1995-96.**

	Henderson poverty line		Half average poverty line		Half median poverty line		OECD poverty line	
	Number '000	Poverty rates (%)	Number '000	Poverty rates (%)	Number '000	Poverty rates (%)	Number '000	Poverty rates (%)
Tenure type								
Owned outright	266	21	168	13	104	8	134	11
Purchaser	357	16	195	9	138	6	159	7
Private renter	296	33	138	15	94	10	123	14
Public renter	220	61	90	25	49	14	102	28
Other [a]	44	36	19	16	17	14	23	19
State of usual residence								
New South Wales	410	25	223	14	144	9	199	12
Victoria	289	24	132	11	72	6	111	9
Queensland	215	25	115	13	90	10	104	12
South Australia	95	26	50	14	32	9	43	12
Western Australia	118	25	66	14	46	10	63	14
Tasmania	33	25	14	11	8	6	12	9
Australian Capital Territory and Northern Territory [b]	26	20	13	10	10	8	11	8
Reference person's country of birth								
Australia	814	24	420	12	286	8	373	11
Other Oceania	40	32	18	14	12	10	20	16
Europe & former USSR	169	23	96	13	59	8	78	11
Middle East & North Africa	69	51	27	20	10	7	25	18
South East Asia	49	34	19	13	10	7	17	11
North East Asia	15	26	10	17	8	15	9	17
Southern Asia	10	21	9	19	5	11	8	16
Northern Asia	3	13	3	13	3	13	3	13
South and Central America	11	39	7	25	5	18	6	20
Rest of Africa	7	19	4	12	4	10	5	13
Reference person's year of arrival to Australia								
Born in Australia	814	24	420	12	286	8	373	11
Before 1976	187	26	103	14	66	9	90	13
1976-80	67	43	31	20	13	9	30	20
1981-85	53	33	23	15	13	8	21	13
1986-90	45	22	21	10	15	7	20	10
1991-1996	22	20	14	13	9	8	9	8

Source: The ABS 1994-96 Survey of Income and Housing Costs.
[a]Other includes rent-free and board-free. [b] ACT and NT are not identified separately in the ABS state breakdown.

References

Australian Bureau of Statistics. 1998, 'Poverty: different assumptions, different profiles.' in *Australian Social Trends*, AGPS, Canberra, pp. 125-129.

Batchelder, A. 1966. *The Economics of Poverty*, John Wiley & Sons, Inc.

Bittman, M.(ed). 1997, *Poverty in Australia: Dimensions and Policies*, SPRC Reports and Proceedings, No. 135, May.

Bradbury, B. 1996, Are the Low-Income Self-Employed Poor?, SPRC Discussion Paper no.73, Social Policy Research Centre, University of New South Wales, Sydney.

Bradbury, B. and Jantti, M. 1998, 'Child Poverty across Industrialised Nations' – Paper presented at the 25th *General Conference of the International Association for Research in Income and Wealth*, Cambridge, England.

Citro, C.F. and Michael, R. (ed) 1995, *Measuring Poverty – A New Approach* National Research Council, National Academy Press, Washington D.C.

Crooks, M., Webb, M., Forster, J. and Williamson Novus, J. 1996, *The Price We Pay – Young people, poverty and long-term unemployment in Australia*, National Youth Affairs Research Scheme, Tasmania.

Commission of Inquiry into Poverty 1975, *Poverty in Australia- First Main Report*, AGPS, Canberra.

Department of Employment, Education, Training and Youth Affairs 1996, The Australian Labour Market in 1995-96 in Healey, K. (ed) *Poverty in Australia- Issues for the nineties*, The Spinney Press, Sydney, pp. 20-21.

Dobson, I., Birrel, B. and Rapson, V. 1995 ' The Participation of Non-English-Speaking-Background Persons in Higher Education', *Journal of the Australian Forum for Population Studies*, Swinbourne University, Australia.

Harding, A. 1995, 'The Impact of Health Education and Housing Outlays upon Income Distribution in Australia in the 1990s.' in *The Australian Economic Review*, 3rd Quarter.

Harding, A. 1996, 'Recent Trends in Income Inequality in Australia' in Sheehan, P., Grewalm B. and Kummick, M., (eds), *Dialogues on Australia's Future – In honour of the late Professor Ronald Henderson*, Centre for Strategic Economic Studies, Victoria University, Melbourne.

Harding, A. 1997, 'The Suffering Middle: Trends in Income Inequality in Australia 1982 to 1993-94.' in *The Australian Economic Review*, vol 30, no 4.

Johnson, D., 1998, 'Incorporating Non-cash Income and Expenditure in the Measurement of Inequality and Poverty' in Eckersley, R., (ed) 1998, *Measuring Progress – Is Life Getting Better?*, CSIRO, Australia. pp. 255-266.

King, A., 1998, 'Income Poverty Since the Early 1970s.' in Fincher, R. and Nieuwehuysen, J. (eds), *Australian Poverty: Then and Now*, Melbourne University Press, Australia.

Martina, A., and Rajaratnam, N. 1994, *A disadvantaged approach to the ranking of social welfare and poverty levels: An application to Australian data*, Discussion Paper no. 323, March, Centre for Economic Policy Research, The Australian National University.

Mitchell, D. and Harding, A. 1993, 'The Efficiency and Effectiveness of the Tax-Transfer System in the 1980s: A rejoinder.' in *Australian Tax* , pp. 403-416.

Landt, J. and King, A. 1996 'Poverty in Australia' *Income Distribution Report*, National Centre for Social and Economic Modelling, University of Canberra, no. 4, pp.1-5.

Landt, J. and Scott, P. 1998, 'Youth Incomes' in *Australia's youth: reality and risk. – A national perspective on developments that have affected 15-19 year olds during the 1990s*. Dusseldorp Skills Forum, Australia.

Saunders, P. 1996, 'Poverty in the 1990s – A Challenge to Work and Welfare.' in . Sheehan, P., Grewal, B. and Kummick, M. (eds), *Dialogues on Australia's Future- In honour of the late Professor Ronald Henderson*, Centre for Strategic Economic Studies, Victoria University, Melbourne. pp. 325-350.

Saunders, P. 1997, 'Living Standards, Choice and Poverty'. *Australian Journal of Labour Economics*. vol. 1, no. 1, The Centre for Labour Market Research, Australia. pp. 49-67.

Smeeding, T., Saunders, P., Coder,., Jenkins, S., Fritzell, J., Hagenaars, A., Hauser, R. and Wolfson, M. 1993, 'Poverty, inequality and family living standards impacts across seven nations: the effects of noncash subsidies for health, education and housing', in *Review of Income and Wealth* , vol. 39, no. 3.

Taylor, F. 1998, *The Housing Factor – tough choices for low-income earners*. Social Issues Paper no. 7, The Smith Family, Camperdown.

Taylor, J. and McDonald, H. 1992, *Children of Immigrants: Issues of Poverty and Disadvantage*. Bureau of Immigration Research, Department of Immigration and Ethnic Affairs, Canberra.

Travers, P. and Richardson S. 1993, *Living Decently: Material Well-being in Australia*. Melbourne, Oxford University Press.

Travers, P. 1998, *Creating Unequal Futures: New Understanding of poverty. Unequal Futures From the Perspective of Children.* mimeo, Flinders University.

Whiteford, P. 1985, *A Family's Needs: Equivalence Scales Poverty and Social Security*, Research Paper no.27, Development Division, Department of Social Security, Canberra.